

Title (en)
INDEXABLE INSERT AND TOOL FOR MACHINING

Title (de)
WENDESCHNEIDPLATTE UND WERKZEUG FÜR DIE SPANENDE BEARBEITUNG

Title (fr)
PLAQUETTE DE COUPE AMOVIBLE ET OUTIL D'USINAGE PAR ENLÈVEMENT DE COPEAUX

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Application
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Abstract (en)
[origin: WO2013087457A1] The present invention relates to an indexable insert for a tool for machining a workpiece, wherein the indexable insert (10) is 120° rotationally symmetrical about a bore axis (12), which runs vertically and centrally through two opposing end faces (20a, 20b) of the indexable insert (10). Said indexable insert has two identical sub-elements (16a, 16b) which are connected to one another, each of which has three identical main cutting tips (18a-c, 18d-f) arranged relative to one another at an angle of 60° and in one plane, which run parallel to the two opposing end faces (20a, 20b) and at an angle to the bore axis (12). The two sub-elements (16a, 16b) are formed on the one hand as mirror-inverted to one another relative to a mirror plane, which runs vertical to the bore axis (12) and which is at the same distance from the two end faces (20a, 20b), and on the other hand are additionally rotated relative to one another about the bore axis (12) by a defined rotational angle (22). The three main cutting tips (18a-c, 18d-f) of each sub-element (16a, 16b) of the indexable insert (10) are formed as cutting edges at the transition between the end face (20a, 20b) of the respective sub-element (16a, 16b) and a cutting face (38a-f) is formed transverse to the respective end face (20a, 20b). The respective cutting face (38a-f) is tilted at a defined cutting angle relative to the bore axis (12). A contact surface (40a-f) running parallel to the bore axis (12) is formed between the mirror plane and the cutting surfaces (38a-f) of each sub-element (16a, 16b). Each cutting edge (18 a-f) is rounded off at the end side at the first end (32) thereof by a corner radius (26) and which has at the second end (34) thereof lying opposite in the edge direction (30) a material incision provided with a chamfer (28).

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